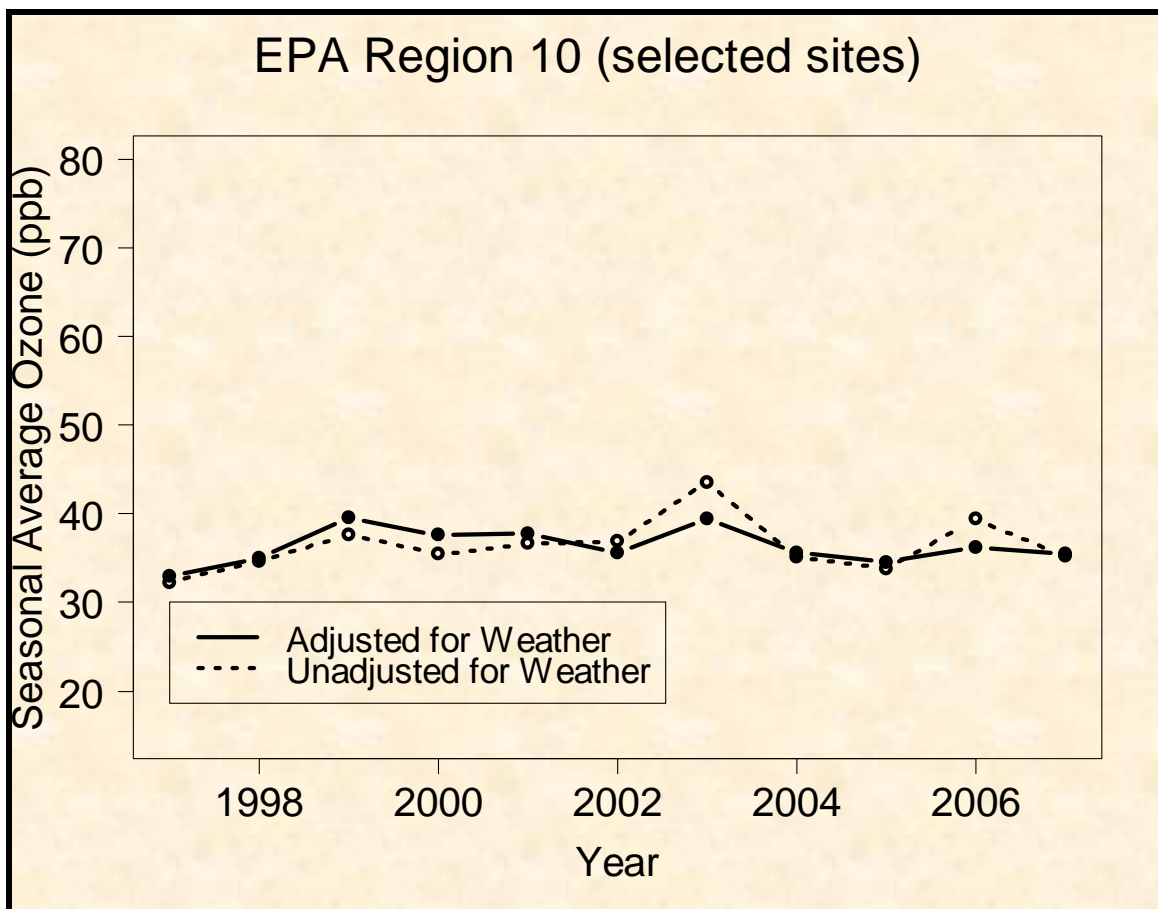


# Weather Makes a Difference: 8-hour Ozone Trends for 1997-2007

State and Local Information for EPA Region 10

Oregon  
Washington

Composite trend for available sites in these states:



U.S. Environmental Protection Agency  
Office of Air and Radiation  
Office of Air Quality Planning and Standards

April 2008

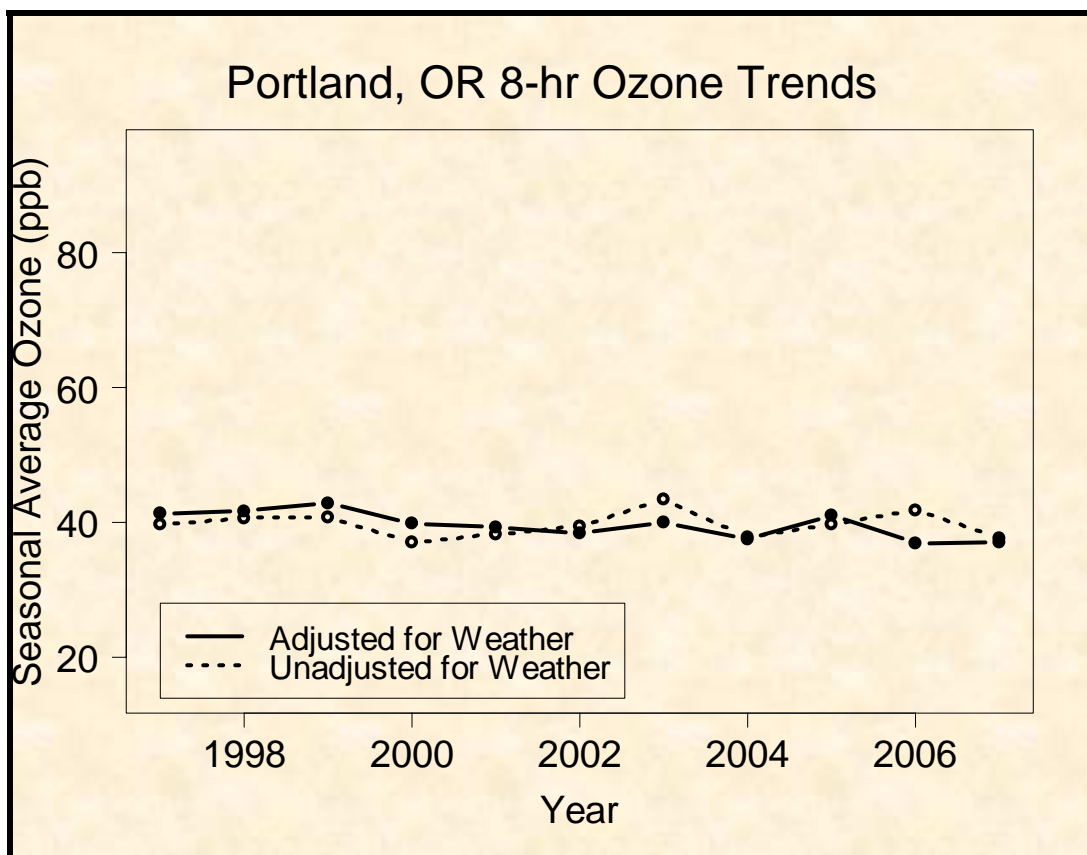
## Oregon

### Ozone

In Portland ozone adjusted for weather conditions declined 10 percent between 1997 and 2007. This improvement in ozone is in response to both state and regional reductions in NO<sub>x</sub> and VOC emissions.

Trends for 1997-2007 for a site with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends



## Washington

### Ozone

On average, ozone adjusted for weather conditions increased 15 percent between 1997 and 2007. There have been improvements in Seattle in recent years. These improvements in ozone are in response to both state and regional reductions in NO<sub>x</sub> and VOC emissions. Ozone trends vary from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends

